

**Serial No. 10/516,084
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In the Specification:

Please replace the Abstract with the following new paragraph.

An apparatus for monitoring the structural integrity of a component. A monitoring structure is applied to a component that is subject to structural degradation. The monitoring structure includes an electrical conductor that becomes cracked if the component becomes structurally degraded. When the component is a ductile metal component that may be degraded by bending, the electrical conductor is formed of a brittle material that cracks when the ductile metal component is bent. When the component is a brittle ceramic heat shield wherein a crack having a critical length is of concern, the electrical conductor is located at a predetermined location wherein a critical length crack in the component will propagate into the conductor. A crack in the electrical conductor is detected with a monitoring device to indicate a degraded structural condition in the component.